

Year 7 Science

Topics you will cover

Cells and organisation, Reproduction, Kinetic theory of matter, Simple chemical reactions, Light, Introduction to forces and The Solar system.

The big Science questions you should be able to answer

1. I can describe what a cell is and how cells work together to form an organism.
2. I can explain how different organisms produce offspring with or without variation
3. I can describe and explain the behaviour of solids, liquids and gases using the particle theory of matter.
4. I can identify different types of chemical reaction including oxidation, combustion, thermal decomposition and neutralisation.
5. I can explain how indicators can be made and used to identify acids and alkalis.
6. I can explain how mirrors work and why objects in water look closer than they really are.
7. I can explain the motion of an object in terms of forces.
8. Explain why the sun and the stars move across the sky and what our local neighbourhood, the solar system, looks like.



The scientific concepts you should be able to use

1. You can explain what a scientific model is
2. I can describe how there are advantages and disadvantages which are caused by scientific progress.
3. I can use scientific language to communicate ideas.
4. I can select the right equipment to collect data for a practical.
5. I can recognise patterns from scientific evidence.



The scientific words you should be able to describe

Cell	Nucleus	Cytoplasm	Cell membrane	Vacuole	Cell wall
Mitochondria	Ribosomes	Chloroplast	Organ	Menstrual cycle	sexual
asexual	Period	DNA	Sperm	Egg	Fertilisation
Oviduct	Testes	Ovary	Uterus	Vagina	Penis
Variation	Embryo	Foetus	Placenta	Umbilical cord	pollination
Stamen	Anther	Style	Stigma	Solid	Liquid
Gas	Property	Melting	Boiling	Condensation	Freezing
Expand	Contract	Evaporation	Diffusion	Pressure	Element
Thermal decomposition	fuel	Compound	Combustion	Oxidation	Acid
Alkali	Indicator	Neutralisation	pH scale	Salt	Dispersion
Spectrum	Reflection	Refraction	Scattering	Normal	Absorption
Transmission	Normal/Contact	Upthrust	Balanced	Unbalanced	Resultant force
Friction	Gravity	Weight	Mass		

